



Department of Energy

Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

014480

MAY 12 1995

Mr. Steve M. Alexander  
Perimeter Areas Section Manager  
Nuclear Waste Program  
State of Washington  
Department of Ecology  
1315 W. Fourth Avenue  
Kennewick, Washington 99336-6018

Mr. Douglas R. Sherwood  
Hanford Project Manager  
U.S. Environmental Protection Agency  
712 Swift Boulevard, Suite 5  
Richland, Washington 99352-0539



Dear Messrs. Alexander and Sherwood:

NOTIFICATION OF RECENT MALFUNCTION AT THE 100-HR-3 PUMP AND TREAT SYSTEM

On May 4, 1995, at 7:00 a.m. the operating technician arrived at the 100-HR-3 Pump and Treat site and found that the order of flow to the ion exchange columns had changed from the previous day. As a result, the most saturated column was reordered as the last column in a series of three, thus reducing the effectiveness of the system and allowing contaminants to bleed off of the last column into the effluent.

As a worst case estimate, approximately 5,100 gallons of treated water containing 180 ppb chromium were reinjected into the ground during the night. This is a worst case estimate because it cannot be certain whether the system configuration changed at the beginning, middle, or at the end of the treatment cycle.

As discussed with your staff, the problem appears to be with the automated controls system. Bechtel Hanford, Inc. is currently checking the controls system and is operating in manual mode under close supervision until the problem is remedied.

If you have any questions, please contact Mr. K. M. Thompson at 373-0750.

Sincerely,

Julie K. Erickson, Director  
River Sites Restoration Division

RSD:KMT

cc: L. E. Gadbois, EPA  
W. W. Soper, Ecology